

REMARKS/ARGUMENTS

Claims 1-22 are pending. Claims 1 and 17 have been amended. New claims 21 and 22 have been added. Replacement sheets of drawings have been attached. No new matter has been introduced. Applicants believe the claims comply with 35 U.S.C. § 112.

Applicants note with appreciation the indicated allowability of claims 2 and 20 if rewritten in independent form. They have been rewritten as new claims 21 and 22. Thus, claims 21 and 22 are allowable.

Claims 1, 3-5, 8, 9, 13-17, and 19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,895,514 to Cantryn et al.

Applicants respectfully submit that independent claim 1 is novel and patentable over Cantryn et al. because, for instance, Cantryn et al. does not teach or suggest a plurality of jet pumps each extending from a jet pump inlet at an upstream location upstream of the flame shield to a jet pump outlet at a downstream location downstream of the flame shield, each jet pump inlet being disposed near one of the gas spud outlets to receive the heating gas from the gas spud outlet and being spaced by a distance from the one of the gas spud outlets to receive the duct gas from the gaseous stream for premixing of the heating gas and the duct gas in the jet pump.

The Examiner alleges that the pipes 50 in Fig. 4 of Cantryn et al. are jet pumps as recited. The pipe 50, however, is not spaced by a distance from a gas spud outlet to receive the duct gas from the gaseous stream for premixing of the heating gas and the duct gas in the jet pump. Instead, the pipe 50 is connected to the fuel gas flow feeding tube 10" to receive only the fuel gas, and does not receive any duct gas, so that there is no premixing of the heating gas and the duct gas in the pipe 50.

For at least the foregoing reasons, independent claim 1 and claims 3-5, 8, 9, and 13-16 depending therefrom are novel and patentable over Cantryn et al.

Applicants respectfully assert that independent claim 17 is novel and patentable over Cantryn et al. because, for instance, Cantryn et al. fails to disclose or suggest means for supplying a portion of the heating gas into the duct at a gas discharge location which is

downstream of the flame shield and near the intermediate location of the duct, and another portion of the heating gas into the duct as gas jets directed into the jet pump inlets of the jet pumps for premixing of the heating gas and the duct gas in the jet pumps to be discharged through the jet pump outlets.

As discussed above, the pipe 50 in Cantryn et al. is connected to the fuel gas flow feeding tube 10" to receive only the fuel gas, and does not receive any duct gas, so that there is no premixing of the heating gas and the duct gas in the pipe 50.

For at least the foregoing reasons, independent claim 17 and claim 19 depending therefrom are novel and patentable over Cantryn et al.

Dependent claims 7, 10-12, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cantryn et al. Applicants note that claims 7, 10-12, and 18 are allowable as being directed to additional features of the invention as well as by being dependent from allowable independent claims 1 and 17.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Cantryn et al. in view of U.S. Patent No. 4,737,100 to Schnell et al. The Examiner cites Schnell et al. for allegedly disclosing divergent fuel streams. Applicants note, however, that Schnell et al. does not cure the deficiencies of Cantryn et al., in that it also fails to disclose or suggest a plurality of jet pumps each extending from a jet pump inlet at an upstream location upstream of the flame shield to a jet pump outlet at a downstream location downstream of the flame shield, each jet pump inlet being disposed near one of the gas spud outlets to receive the heating gas from the gas spud outlet and being spaced by a distance from the one of the gas spud outlets to receive the duct gas from the gaseous stream for premixing of the heating gas and the duct gas in the jet pump, as recited in claim 1 from which claim 6 depends. Therefore, claim 6 is patentable.

Appl. No. 10/688,792
Amdt. dated March 15, 2005
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CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



Chun-Pok Leung
Reg. No. 41,405

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 415-576-0300
Attachments
RL:rl
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Amendments to the Drawings:

The attached sheets of drawings include replacement sheets to replace the original sheets including Figs. 1-4.

Attachment: Replacement Sheets